REMARKS

Applicants confirm that the specification that Applicants filed on 4/11/02 contains only subject matter from the originally filed application that was filed on 2/8/02.

Applicants will submit either an English translation or a concise explanation of the relevance of Japanese Patent No. 60-166339.

Claims 1-23 are pending.

Claims 4, 22, and 23 stand rejected under 35 U.S.C. §112, first paragraph, on the ground that the specification fails to describe how to make styrene-ethylene-ethylene-propylene-styrene ("SEEPS") block copolymers. In response, Applicants note that SEEPS is a commercially available polymer sold under the trade designation "SEPTON®," as shown in the attached sheet. Because the material is commercially available, it is not necessary to describe how to prepare it. Accordingly, the rejection should be withdrawn.

Claims 1-23 stand rejected under 35 U.S.C. §112, second paragraph, on the ground that the phrases "substantially fully," "cross-linked thermoplastic vulcanizate," and "thermoplastic matrix" are indefinite. This rejection should be withdrawn for the following reasons.

Applicants have amended claim 1 to delete the word "substantially." The claim now recites a fully cross-linked thermoplastic vulcanizate. The specification defines "fully cross-linked" on page 3. The amended claim thus meets the requirements of §112, second paragraph.

The Examiner contends that the phrase "cross-linked thermoplastic vulcanizate" is contradictory because a crosslinked material cannot be a thermoplastic material. In response, Applicants note that the specification expressly defines this phrase on page 2 as relating to "a dynamically vulcanized, full cross-linked mixture of a thermoplastic resin and an elastomer or rubber." In light of this definition, and bearing in mind that a patentee can be his own lexicographer, the phrase is not contradictory and meets the requirements of §112, second paragraph. Moreover, in light of this definition, Applicants have cancelled claim 6 and have amended claim 7 by deleting the phrase "thermoplastic vulcanizate is a dynamically vulcanized blend of a thermoplastic matrix." The amended claims are now consistent with the definition of "cross-linked thermoplastic vulcanizate" in the specification.

With respect to the phrase "thermoplastic matrix," Applicants have amended claim 5 to replace the word "matrix" with resin, and have deleted the phrase altogether from claim 7, thereby obviating the rejection.

Claims 1-23 stand rejected under 35 U.S.C. §102(b) over Tsujimoto, U.S. 5,597,867 ("Tsujimoto"). Tsujimoto describes blends prepared by combining a block copolymer (which he refers to as a "compatibilizing agent"), a rubber, a thermoplastic resin, and a catalyst, and then dynamically vulcanizing the entire combination to form the final product. In the course of this process, the block copolymer is crosslinked as well. In contrast, Applicants' composition is prepared by dynamically vulcanizing a blend of a rubber, thermoplastic resin, and catalyst, and then combining the dynamically vulcanized product (the "crosslinked thermoplastic vulcanizate") with a styrenic block copolymer. Because dynamic vulcanization takes place prior to addition of the block copolymer, the block copolymer itself is not crosslinked. To clarify this distinction, Applicants have amended claim 1 to recite an uncrosslinked styrenic block copolymer. Because Tsujimoto describes substantially different compositions in which the block copolymer is crosslinked, Tsujimoto does not anticipate claims 1-23.

Claims 1-23 stand rejected under 35 U.S.C. §102(e)/§103 over Okuda, U.S. 6,410,623 ("Okuda"). Okuda describes compositions that include (a) a styrenic block copolymer and (b) a blend of a polyolefin and an ethylene/alpha-olefin copolymer. Ethylene/alpha-olefin copolymers are neither rubbers nor elastomers. Okuda, therefore, fails to describe a crosslinked thermoplastic vulcanizate, which Applicants' specification defines as "a dynamically vulcanized, full cross-linked mixture of a thermoplastic resin and an elastomer or rubber." Because Okuda describes substantially different compositions that lack an elastomer or rubber, Okuda neither anticipates nor renders obvious claims 1-23.

Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: 7/25/03

Dorothy P. Whelan
Reg. No. 33,814

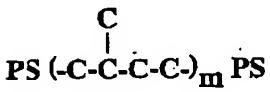
Fish & Richardson P.C., P.A.
60 South Sixth Street
Suite 3300
Minneapolis, MN 55402
Telephone: (612) 335-5070
Facsimile: (612) 288-9696

60152876.doc

SEPTON® is a unique and versatile polymer.

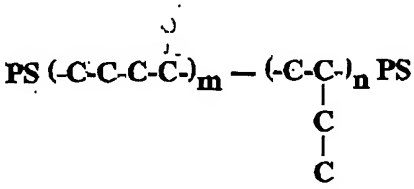
SEPTON® polymers are hydrogenated styrene block copolymer materials. They are available as a hydrogenated poly-isoprene (SEPS), a hydrogenated poly-butadiene (SEBS) polymer or a hydrogenated poly-isoprene/butadiene (SEEPS) polymer.
Each of these polymers has its own set of unique properties.

SEPS



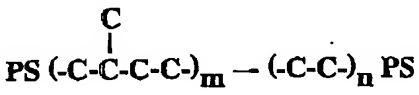
- No Crystallization
- Moderate Tensile Strength
- High Elongation

SEBS



- High Tensile Strength
- Lower Elongation

SEEPS



- Better Mechanical Properties
- Better Oil Absorbency

The versatility of SEPTON® polymers originates from the unique molecular structure. Each molecule of SEPTON® consists of block segments of styrene monomer units and rubber monomer units.

MOLECULAR STRUCTURE MODEL